

Figure 1

$M_r \times 10^{-3}$	1	2	3	4
200	—		—	
116	—	—	—	
92	—		—	
68				
43	—		—	—

— [—] —
[—] —

-βME
+βME

Figure 2

ONCOSTATIN M SIGNAL PEPTIDE

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-25          -20
M  G  V  L  L  T  Q  R  T  L  L  S  L  V  L
ATG GGT GTA CTG CTC ACA CAG AGG ACG CTG CTC AGT CTG GTC CTT 45

-10          -1  +1
A  L  L  F  P  S  M  A  S  M  A  M  H  V  A
GCA CTC CTG TTT CCA AGC ATG GCG AGC ATG GCA ATG CAC GTG GCC 90

Q  P  A  V  V  L  A  S  S  R  G  I  A  S  F
CAG CCT GCT GTG GTA CTG GCC AGC AGC CGA GGC ATC GCC AGC TTT 135

V  C  E  Y  A  S  P  G  K  A  T  E  V  R  V
GTG TGT GAG TAT GCA TCT CCA GGC AAA GCC ACT GAG GTC CGG GTG 180

T  V  L  R  Q  A  D  S  Q  V  T  E  V  C  A
ACA GTG CTT CGG CAG GCT GAC AGC CAG GTG ACT GAA GTC TGT GCG 225

A  T  Y  M  M  G  N  E  L  T  F  L  D  D  S
GCA ACC TAC ATG ATG GGG AAT GAG TTG ACC TTC CTA GAT GAT TCC 270

I  C  T  G  T  S  S  G  N  Q  V  N  L  T  I
ATC TGC ACG GGC ACC TCC AGT GGA AAT CAA GTG AAC CTC ACT ATC 315

Q  G  L  R  A  M  D  T  G  L  Y  I  C  K  V
CAA GGA CTG AGG GCC ATG GAC ACG GGA CTC TAC ATC TGC AAG GTG 360

                                GLYCOSYLATION SITE
E  L  M  Y  P  P  P  Y  Y  L  G  I  G  N  G
GAG CTC ATG TAC CCA CCG CCA TAC TAC CTG GGC ATA GGC AAC GGA 405

T  Q  I  Y  V  I  D  P  E  P  C  P  D  S  D
ACC CAG ATT TAT GTA ATT GAT CCA GAA CCG TGC CCA GAT TCT GAC 450

F  L  L  W  I  L  A  A  V  S  S  G  L  F  F
TTC CTC CTC TGG ATC CTT GCA GCA GTT AGT TCG GGG TTG TTT TTT 495

Y  S  F  L  L  T  A  V  S  L  S  K  M  L  K
TAT AGC TTT CTC CTC ACA GCT GTT TCT TTG AGC AAA ATG CTA AAG 540

K  R  S  P  L  T  T  G  V  Y  V  K  M  P  P
AAA AGA AGC CCT CTT ACA ACA GGG GTC TAT GTG AAA ATG CCC CCA 585

T  E  P  E  C  E  K  Q  F  Q  P  Y  F  I  P
ACA GAG CCA GAA TGT GAA AAG CAA TTT CAG CCT TAT TTT ATT CCC 630

+187
I  N
ATC AAT 636

```

Figure 3

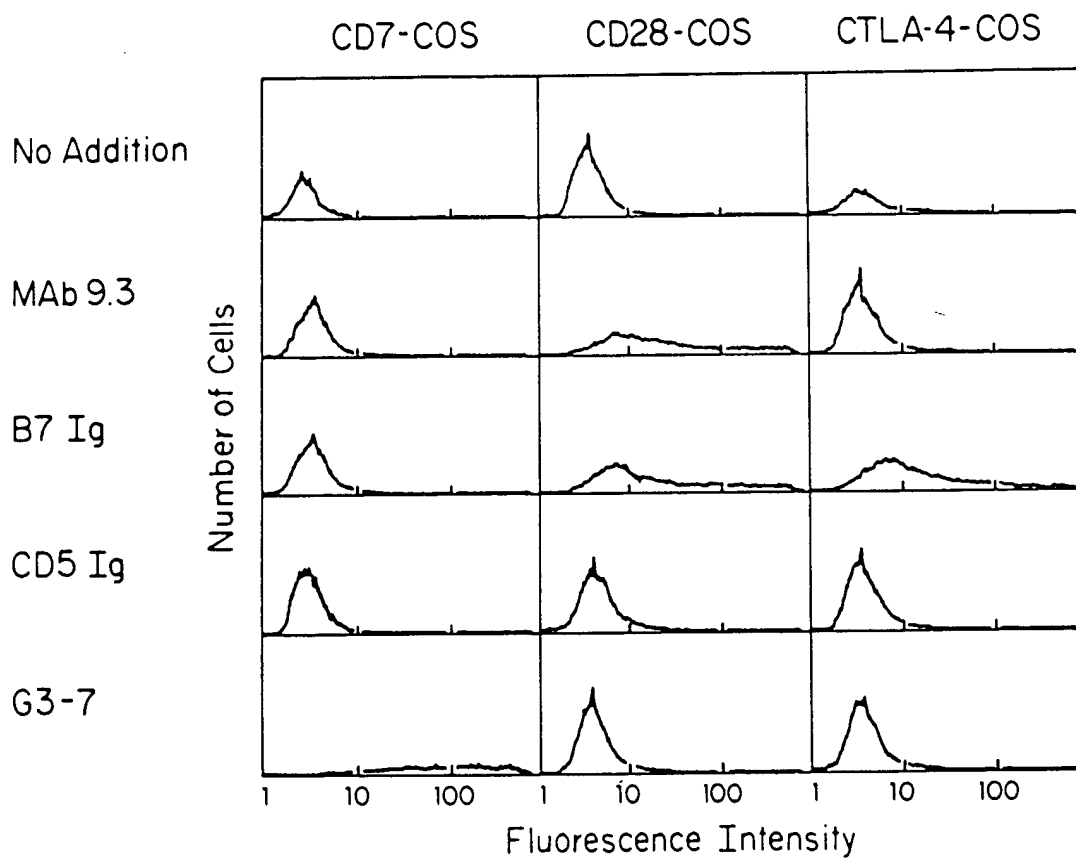


Figure 4

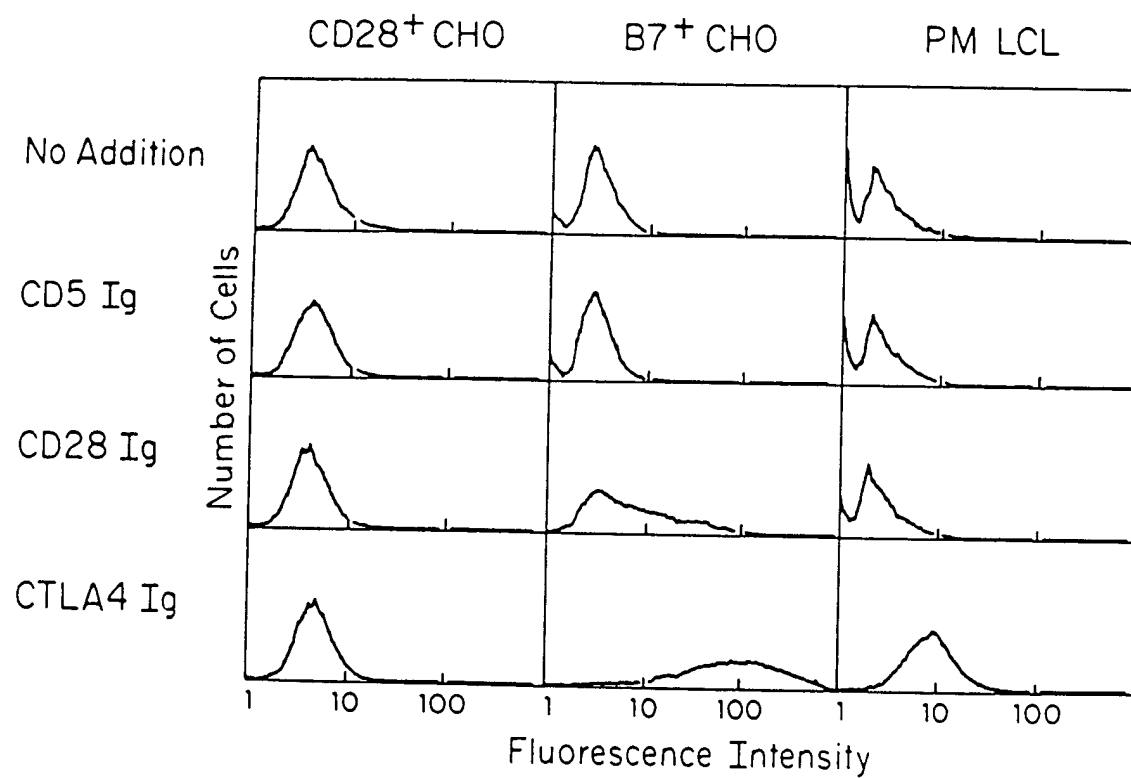


Figure 5

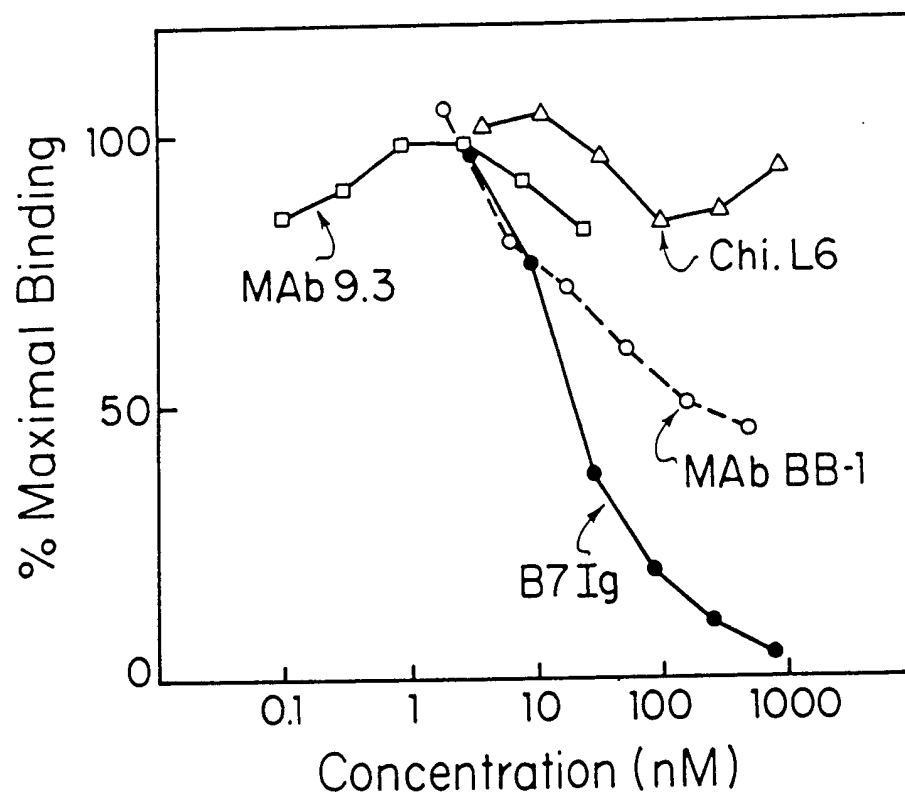


Figure 6

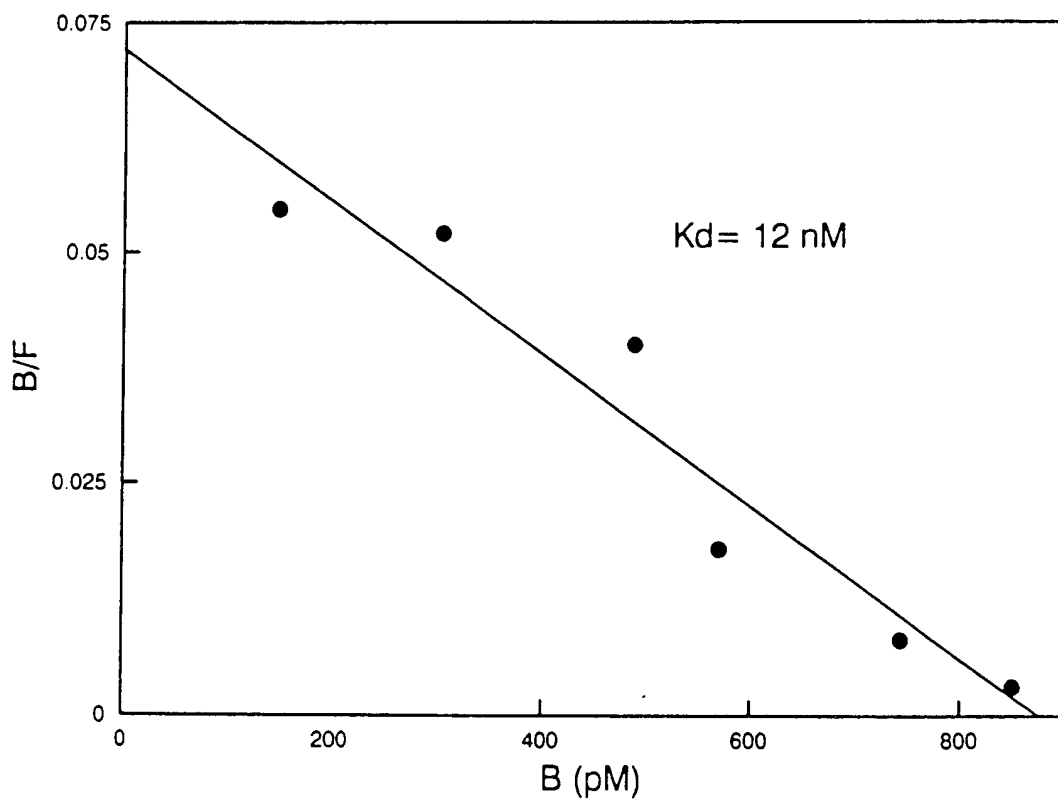


Figure 7

SDS-PAGE gel showing cell surface labeling of B7-1 on CHO cells. The gel has three main sections. The first section, labeled "Cells: B7⁺ CHO", has three lanes for "Addition: CD28 Ig", "CTLA4 Ig", and "CD5 Ig". The second section, labeled "Cells: PM LCL", has three lanes for "Addition: CD28 Ig", "CTLA4 Ig", and "CD5 Ig". The third section, labeled "Cells: B7⁺ CHO", has three lanes for "Addition: CD28 Ig", "CTLA4 Ig", and "CD5 Ig". Molecular weight markers ($M_r \times 10^{-3}$) are indicated on the right: 200, 116, 92, 68, and 43. In the first and third sections, a strong band is visible at approximately 92 kDa in the CTLA4 Ig lane, and a smaller band at approximately 68 kDa in the CD28 Ig lane. In the second section, bands are visible at approximately 92 kDa and 68 kDa in all three lanes.

Figure 8

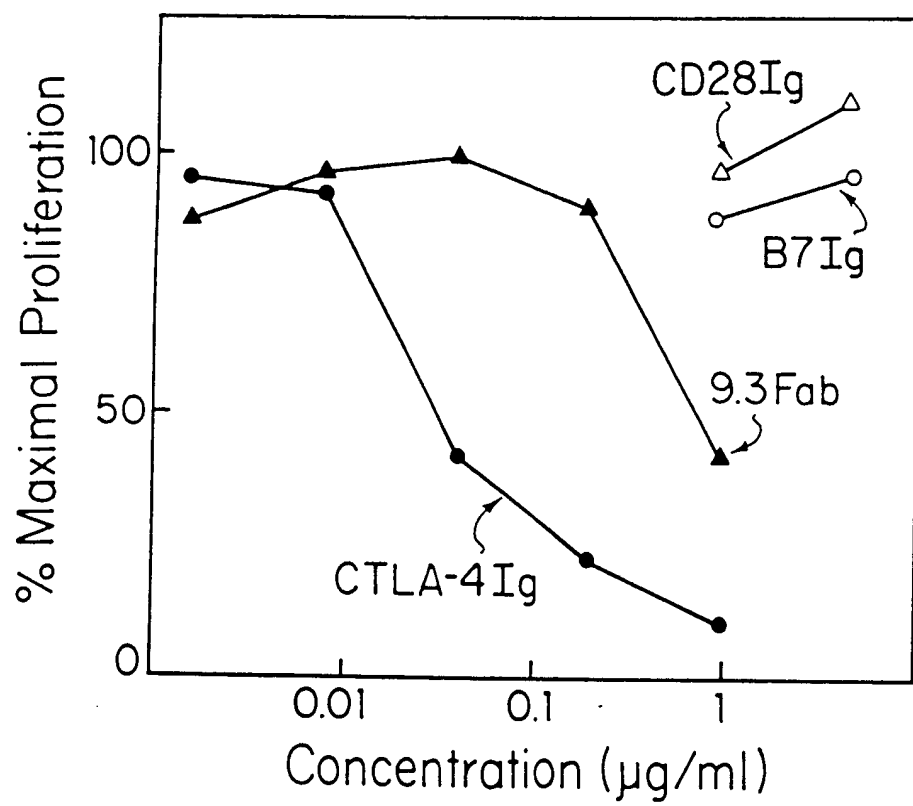


Figure 9

Condition	IgM (ng/ml)
No Addition	145
mAb OKT8	105
mAb 9.3	55
mAb BB-1	65
CD5Ig	105
CTLA4Ig	15

Figure 10

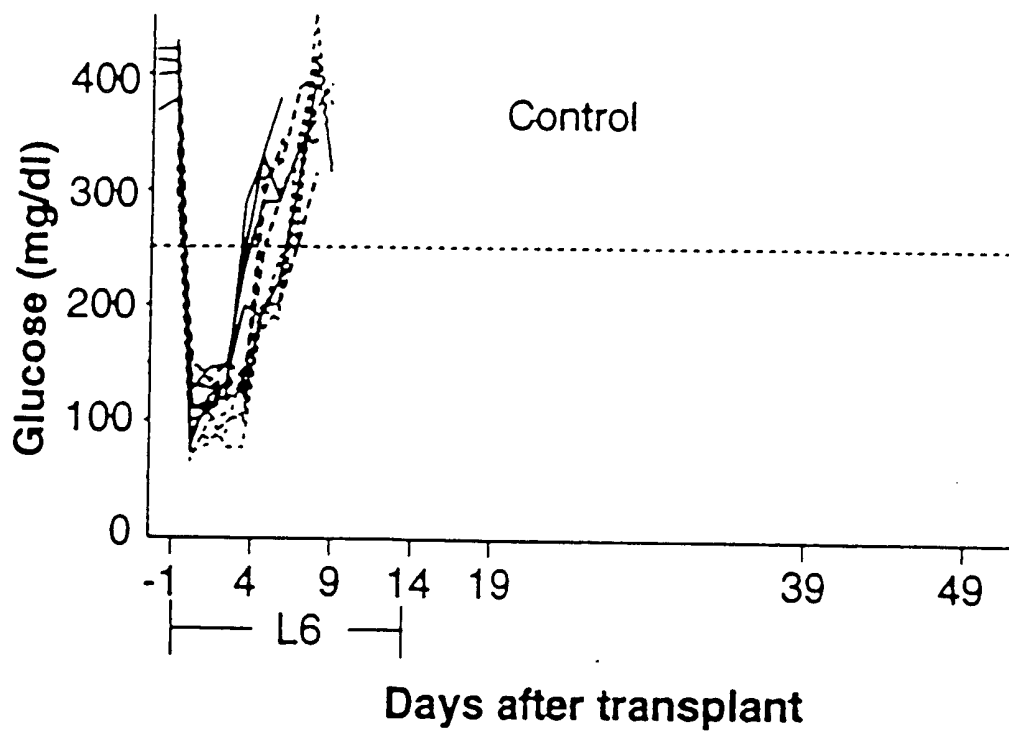


Figure 11A

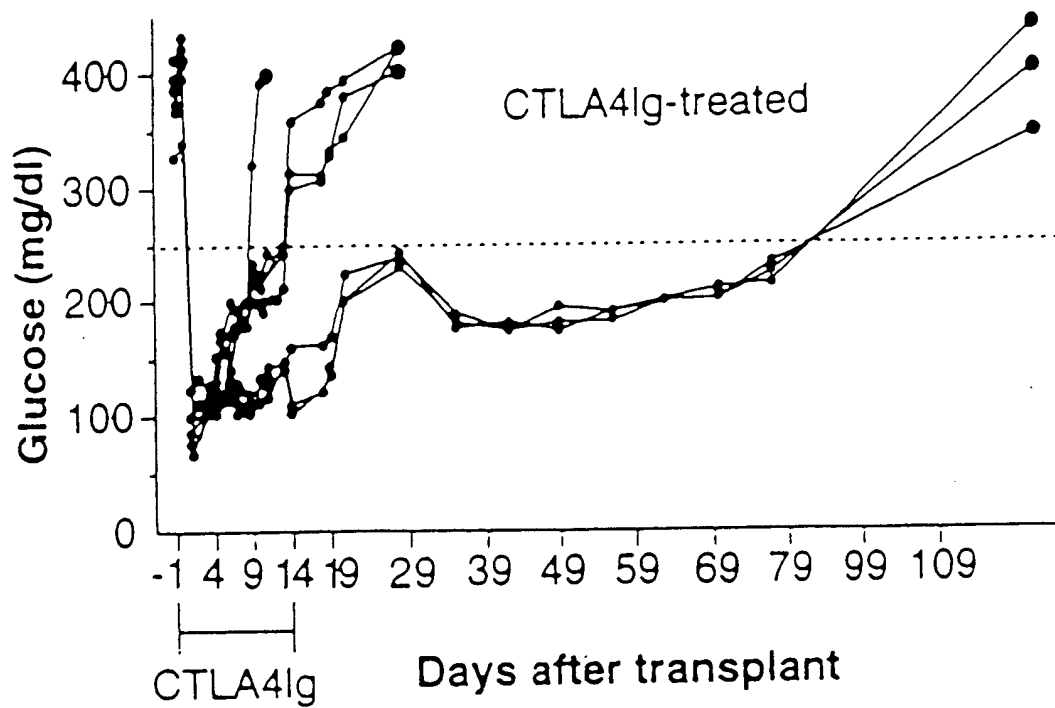


Figure 11B

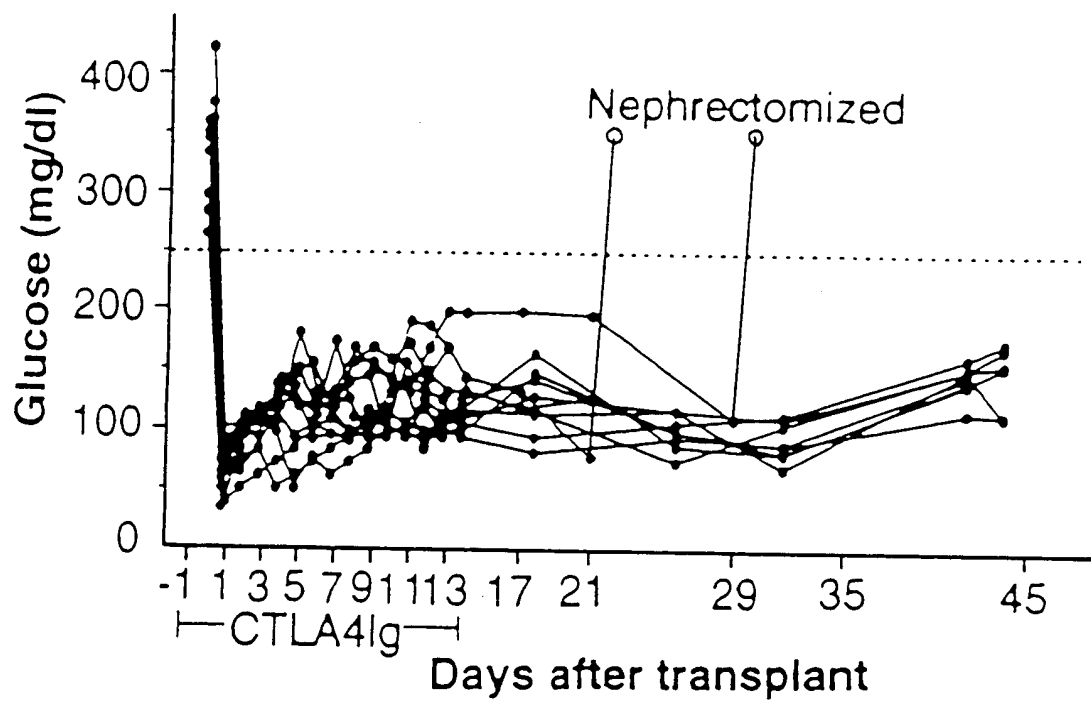


Figure 11C

650327 15045460

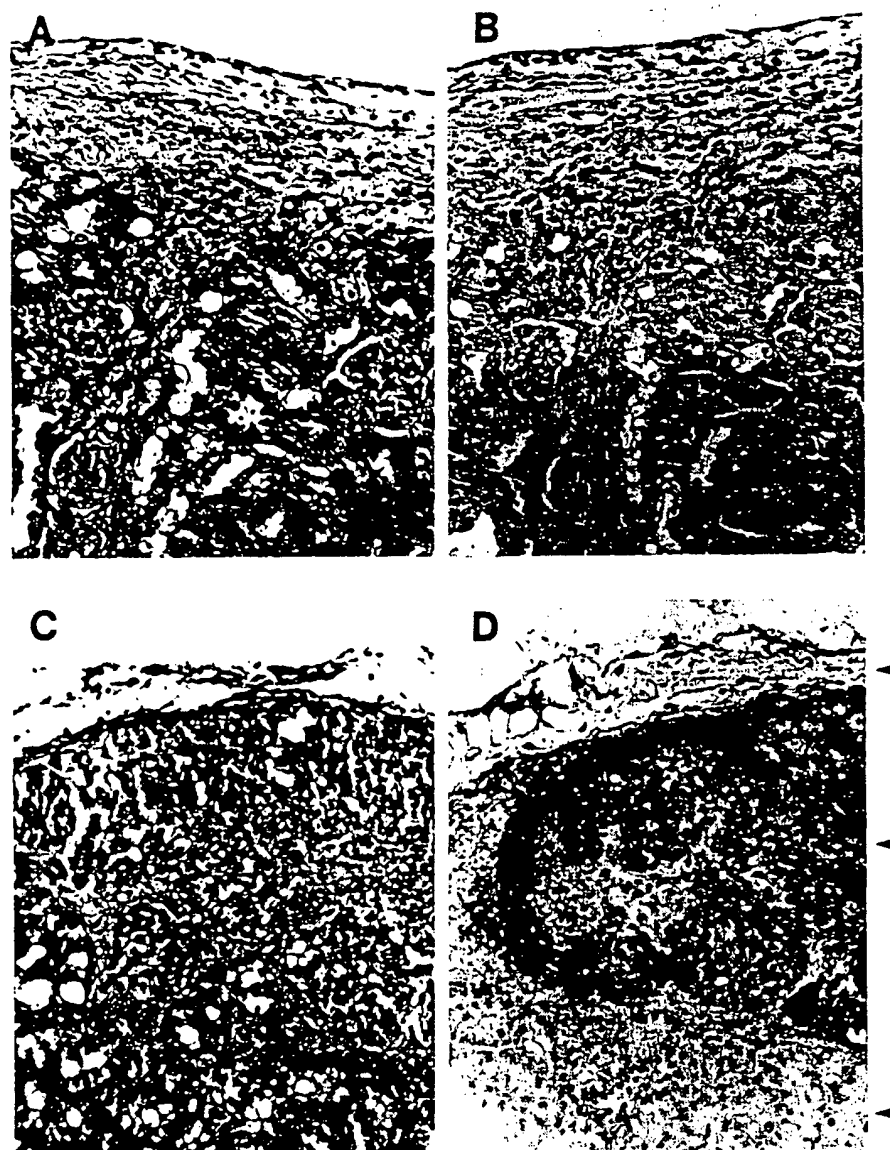


Figure 12

Figure 13

Figure 1 is a line graph showing blood glucose levels (mg/dl) over time (Days after initial transplant) for three groups of rats. The Y-axis ranges from 0 to >450 mg/dl, and the X-axis ranges from 0 to 95 days. A horizontal dashed line at 250 mg/dl represents the normal range. The 'Nephrectomized' group (solid line, filled circles) shows a sharp peak at day 48, exceeding 450 mg/dl. The 'Retransplanted' group (dashed line, open circles) also shows a sharp peak at day 48, reaching approximately 450 mg/dl. The 'Control' group (dotted line, filled circles) remains relatively stable, fluctuating between 100 and 150 mg/dl.

Days after initial transplant	Nephrectomized (mg/dl)	Retransplanted (mg/dl)	Control (mg/dl)
0	380	350	280
1	370	350	280
3	100	50	100
13	130	120	100
42	170	130	120
44	180	170	130
46	120	120	120
48	450	450	140
50	300	380	100
52	140	140	140
54	140	140	170
57	120	120	110
61	140	140	120
69	110	110	110
82	120	120	90
90	110	110	110
95	110	110	80

1

Day	Solid Circle (●)	Open Circle (○)	Solid Square (■)	Open Square (□)	Solid Triangle (▲)
0	10 ²	10 ²	10 ²	10 ²	10 ²
10	8 × 10 ²	4 × 10 ²	5 × 10 ²	10 ²	10 ²
40	8 × 10 ³	2 × 10 ³	2 × 10 ³	10 ²	10 ²
45	4 × 10 ³	2 × 10 ³	1.5 × 10 ³	10 ²	10 ²
55	6 × 10 ⁴	4 × 10 ⁴	3 × 10 ⁴	2 × 10 ²	10 ²
65	6 × 10 ⁴	5 × 10 ⁴	5 × 10 ⁴	2 × 10 ³	4 × 10 ²
75	6 × 10 ⁴	5 × 10 ⁴	5 × 10 ⁴	2 × 10 ³	10 ³

Figure 15

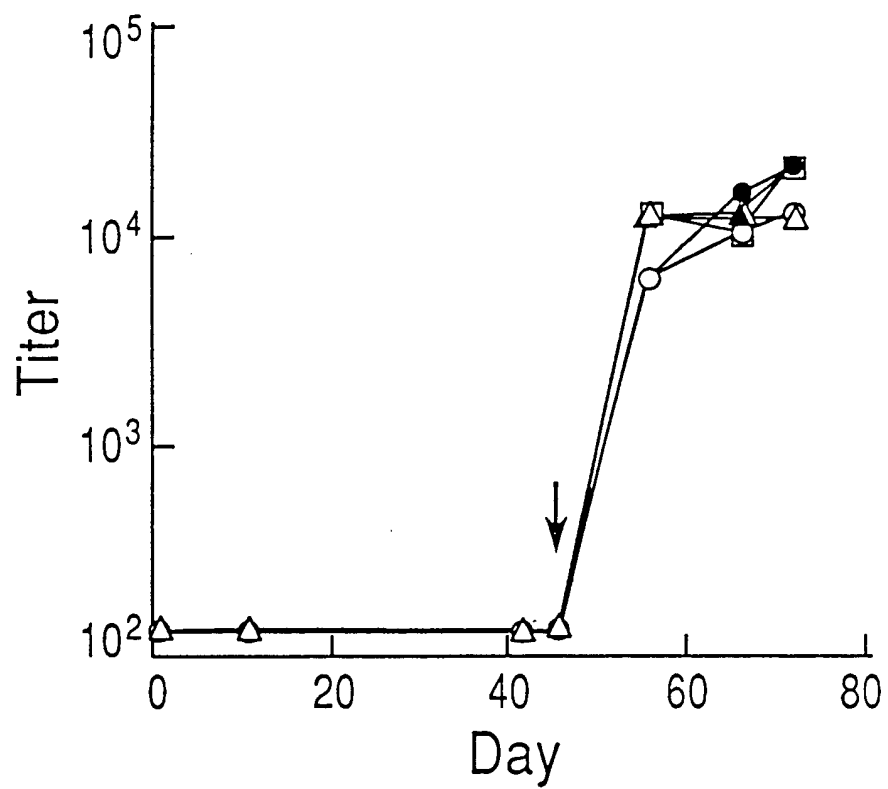


Figure 16

CD28/CTLA-4 family

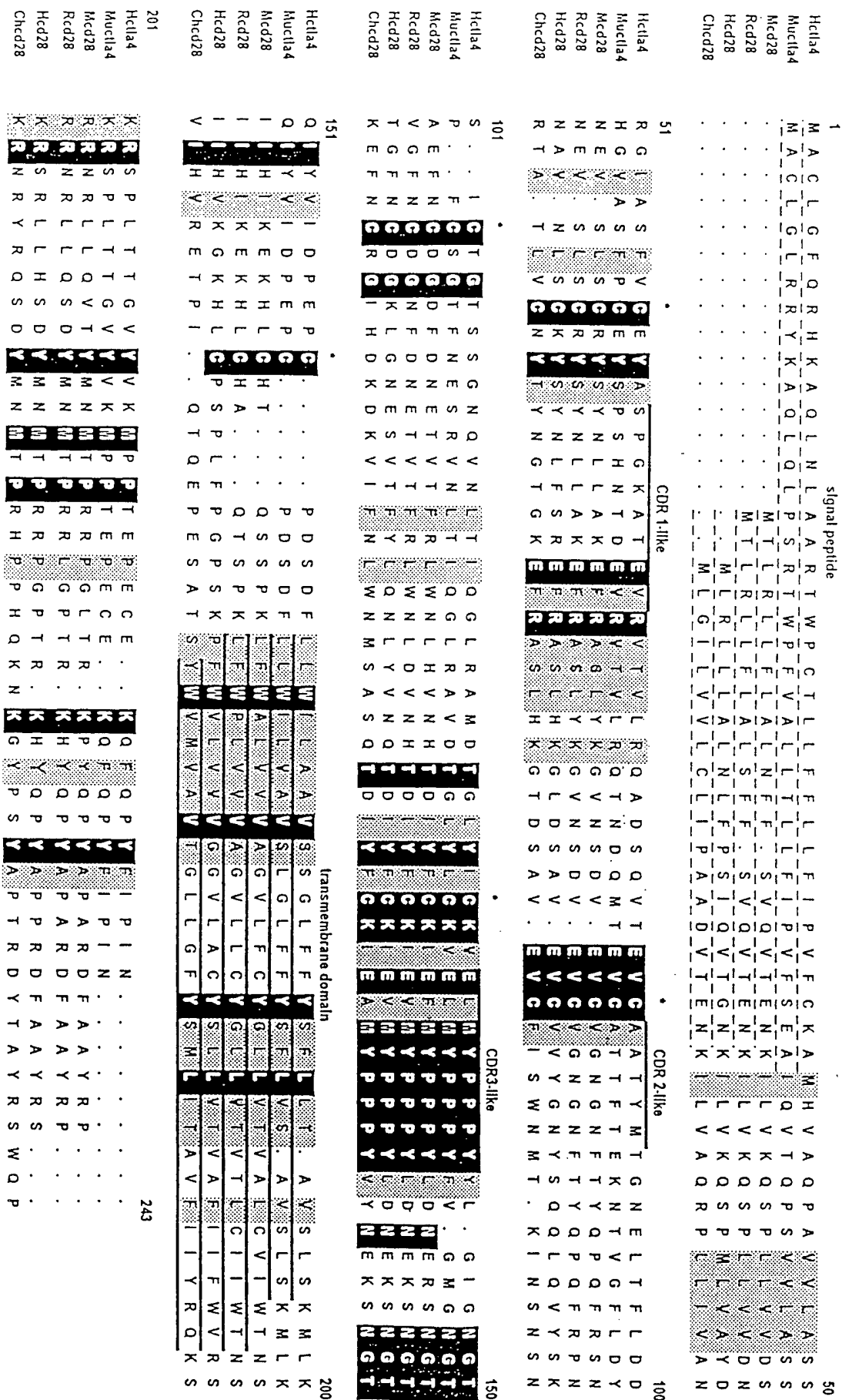


FIGURE 18

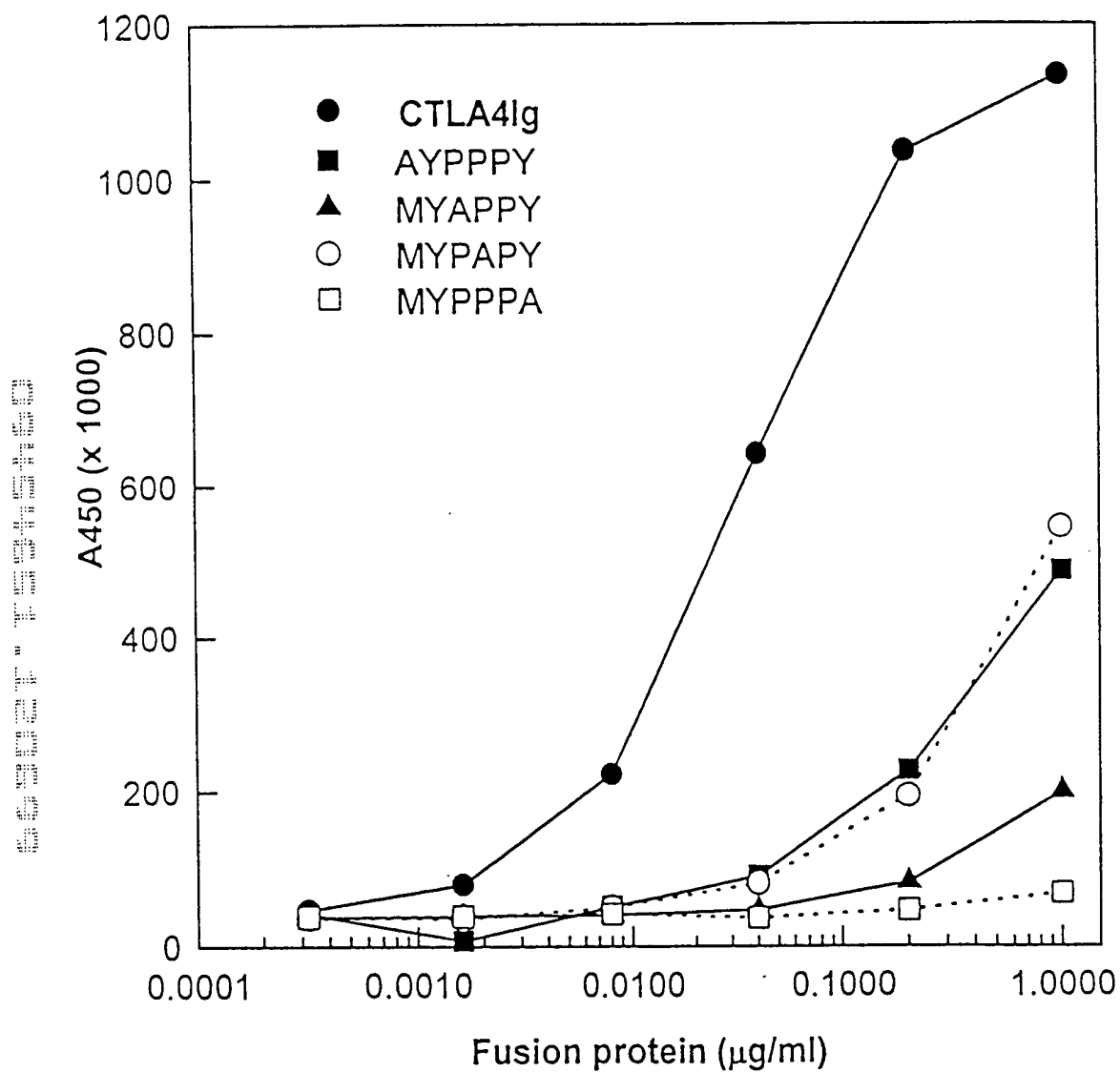


FIGURE 19

% B7
Binding Activity

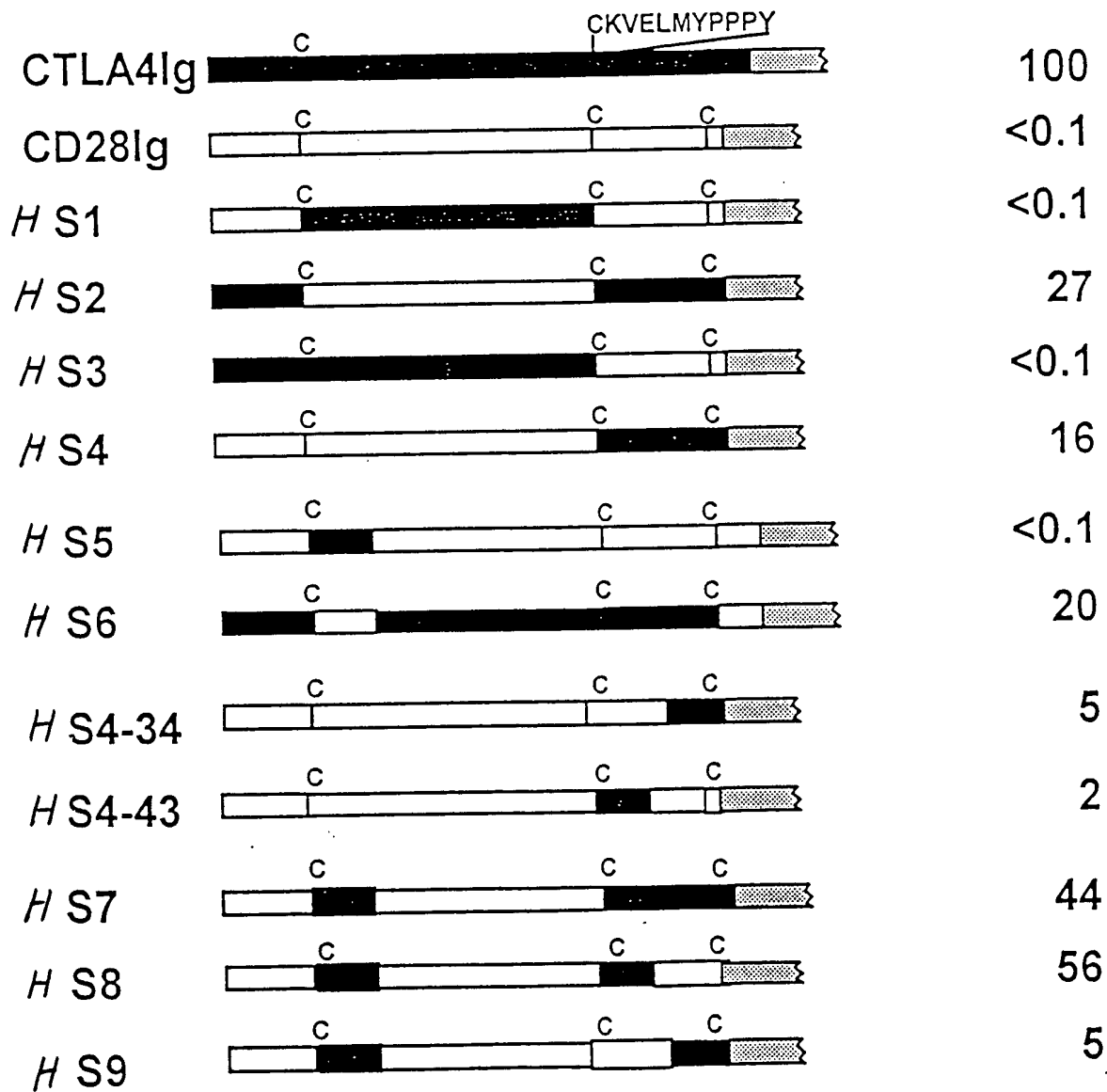


FIGURE 20(a)

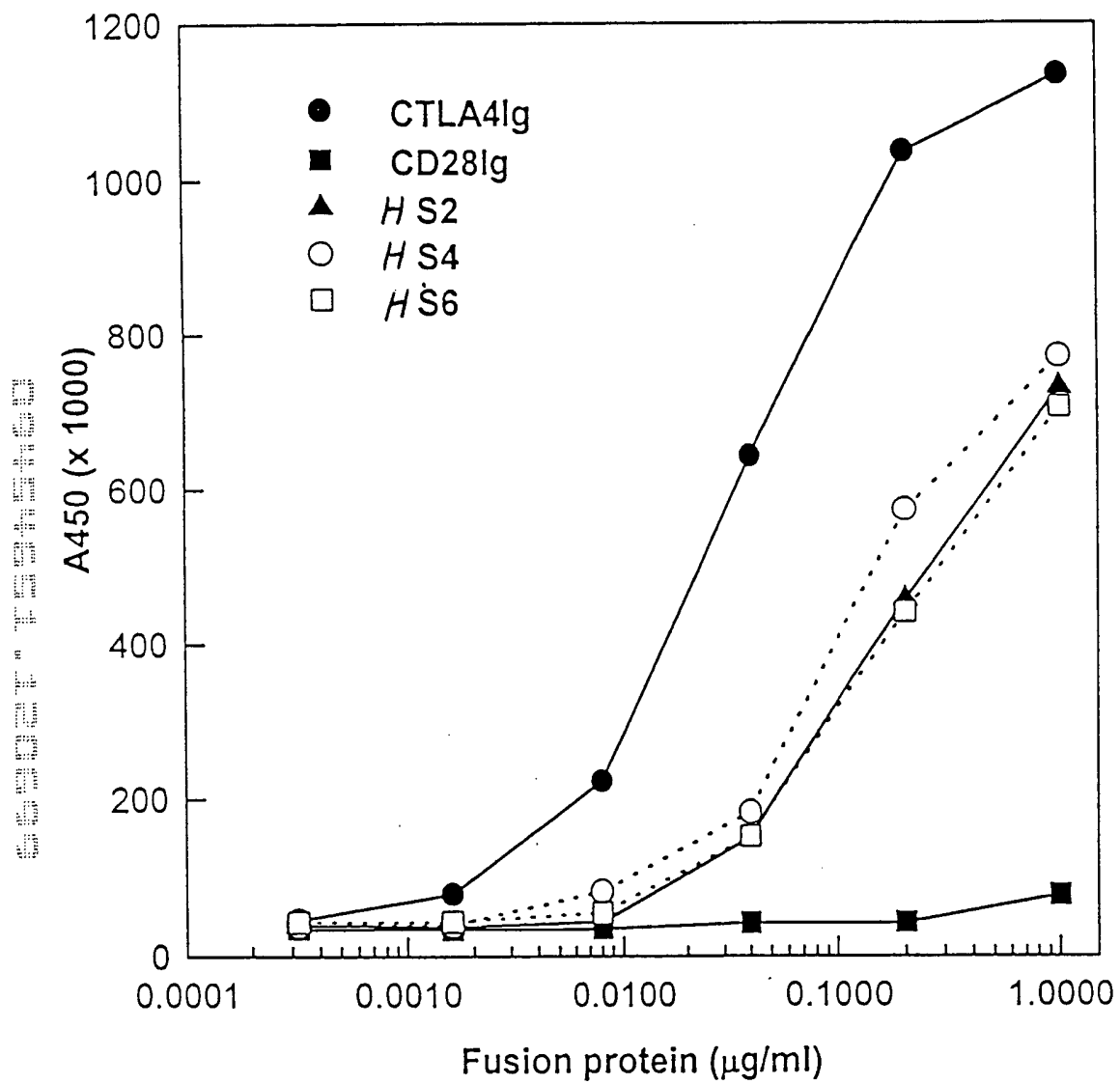


FIGURE 20(b)

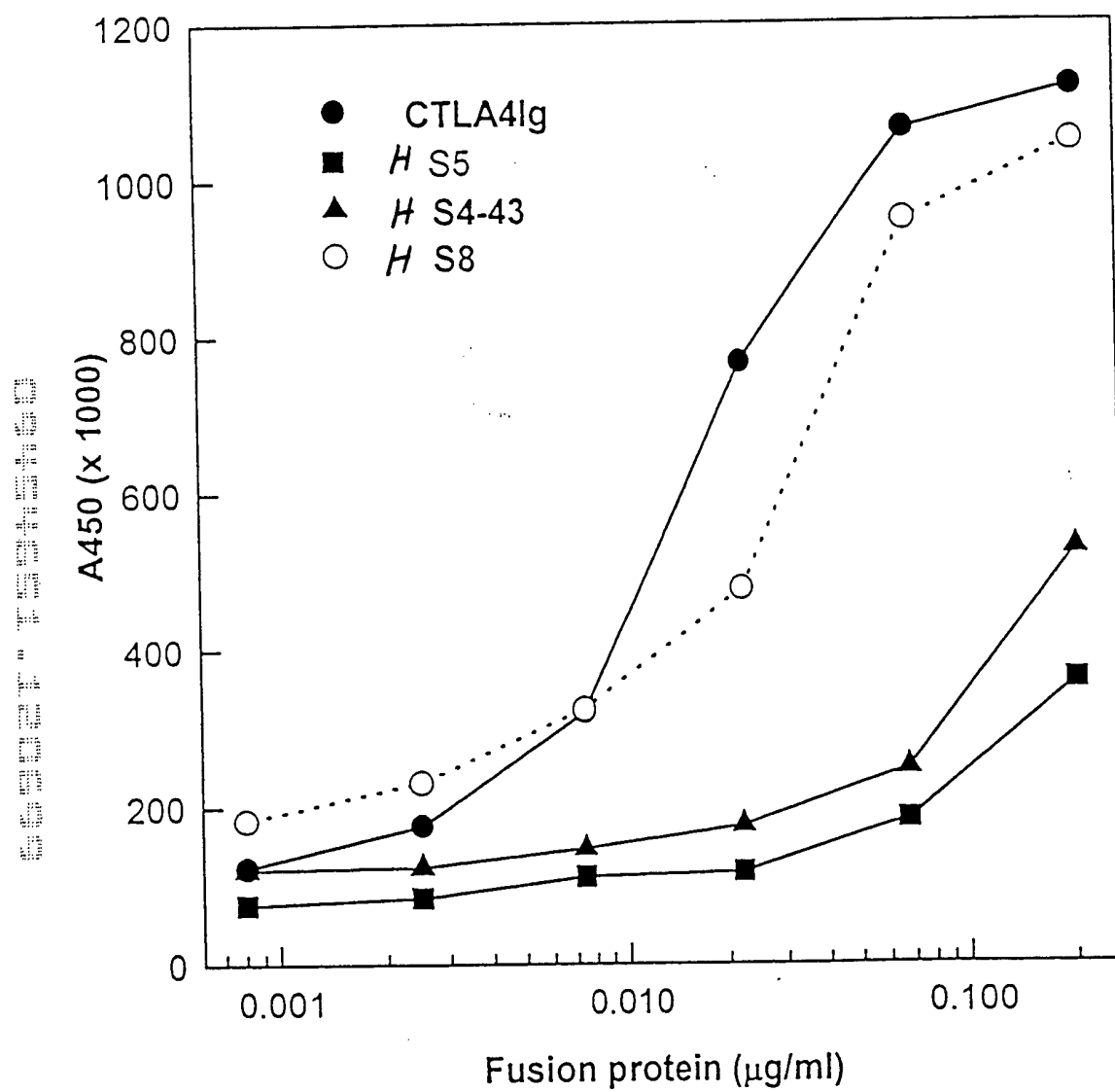


FIGURE 21

